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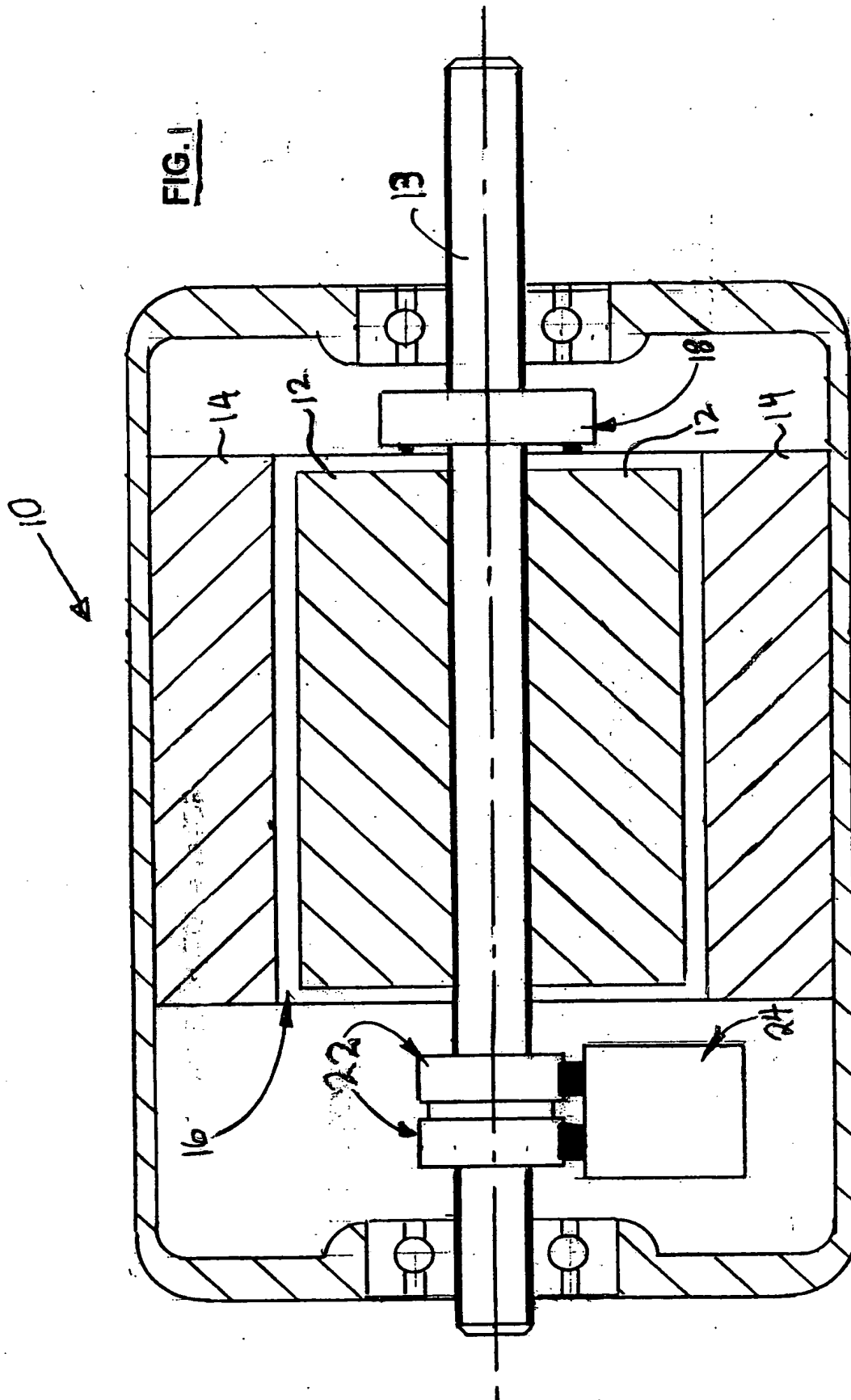


FIG. 2A

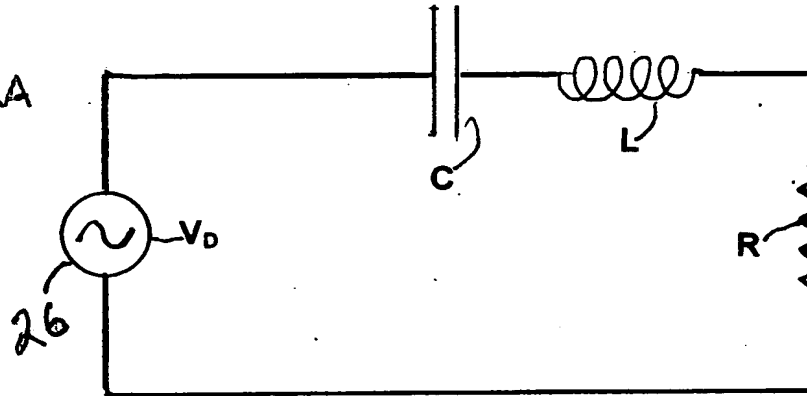


FIG. 2B

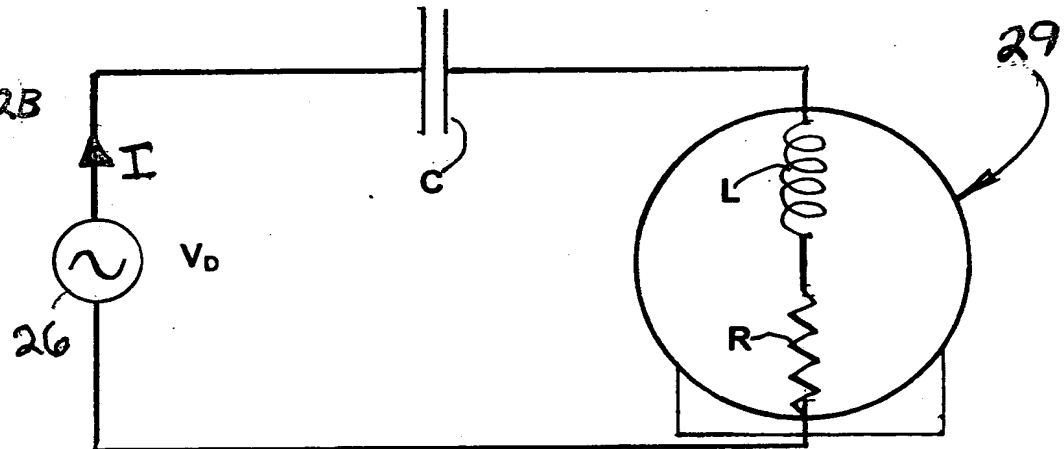
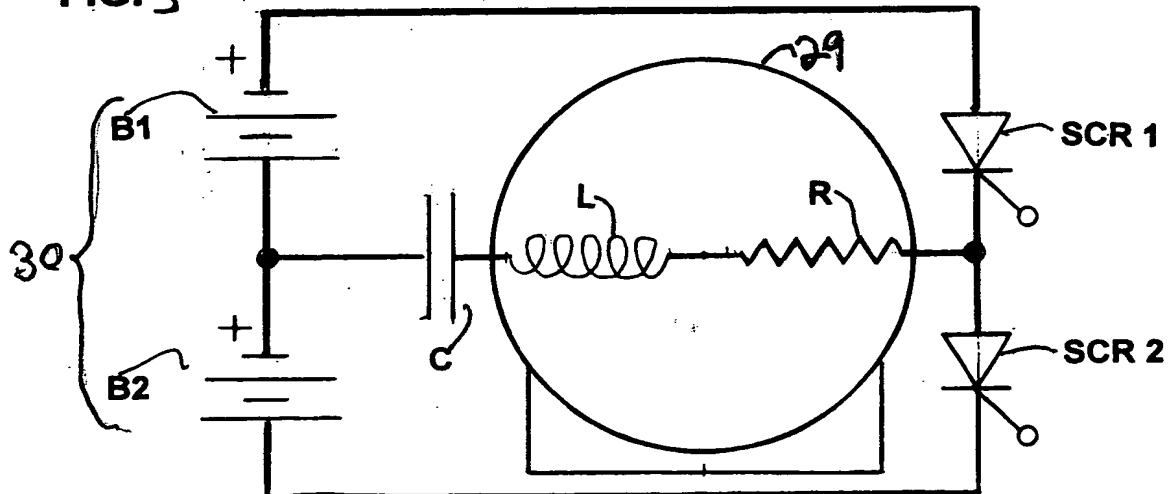
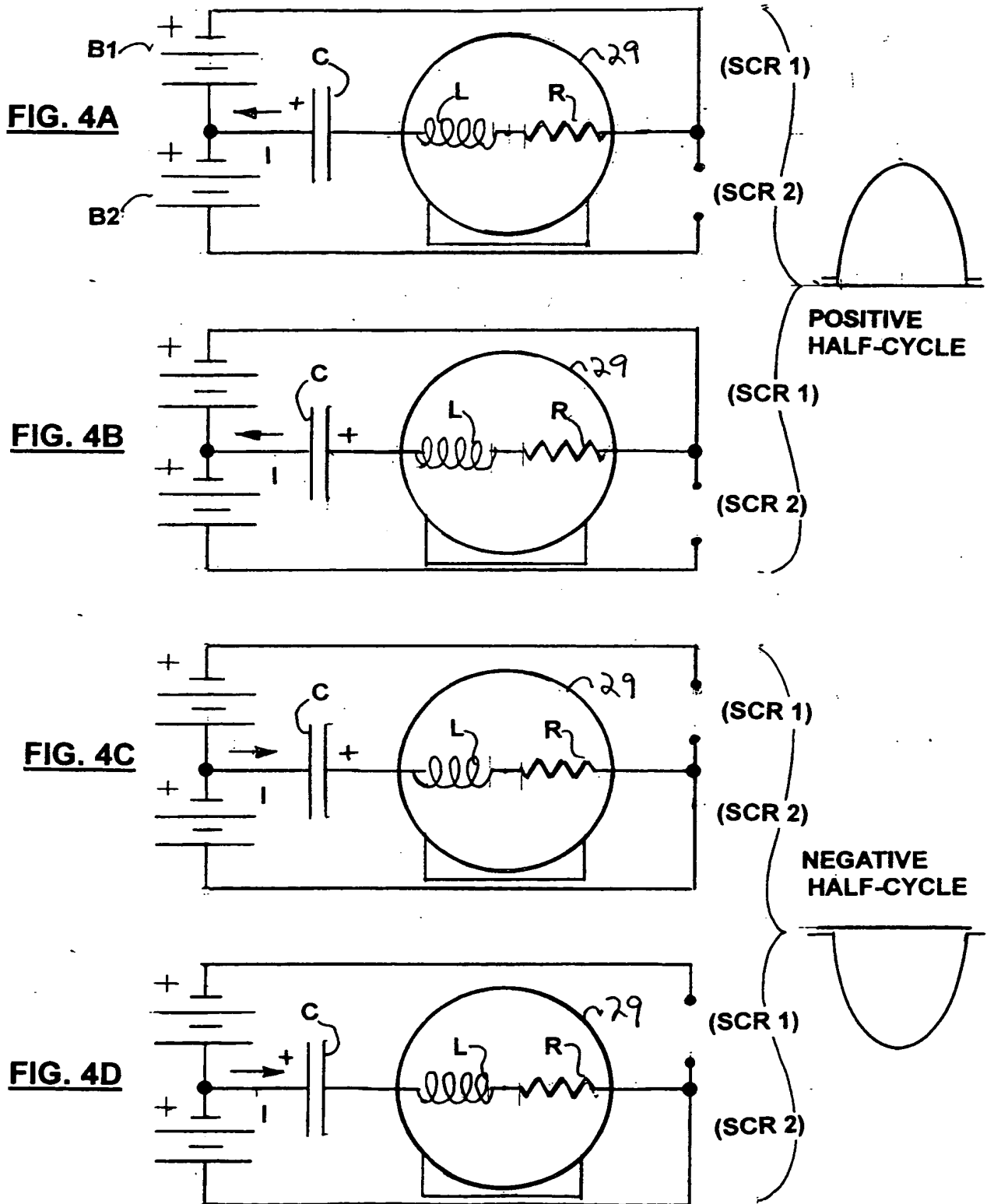


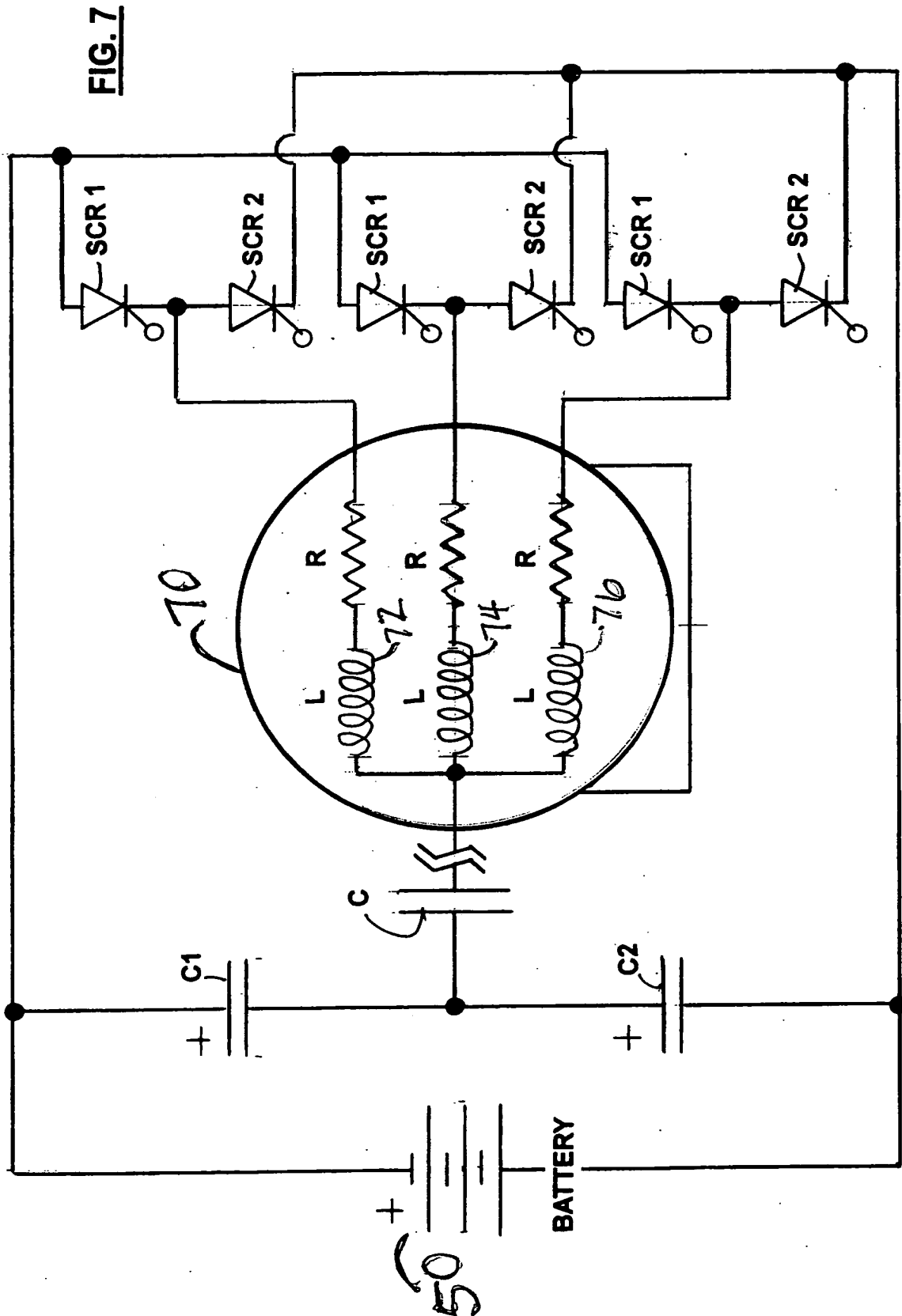
FIG. 3





The diagram shows a DC power source labeled '50' and 'BATTERY (DC POWER SOURCE)'. The positive terminal of the battery is connected to a node that branches to the positive terminal of capacitor C1 and the positive terminal of capacitor C2. The negative terminal of the battery is connected to a common ground. The positive terminal of capacitor C2 is connected to a switch labeled 'C'. The other end of the switch 'C' is connected to an inductor 'L' in series with a resistor 'R'. The other end of the resistor 'R' is connected to a node that branches to the cathode of SCR 1 and the cathode of SCR 2. The anodes of both SCR 1 and SCR 2 are connected to the positive terminal of capacitor C1. The gates of both SCRs are connected to the common ground. The load is represented by a circle containing the inductor 'L' and resistor 'R' in series.

The diagram shows a power supply circuit. An AC power source (52) is connected to a rectifier (29) consisting of two diodes. The rectifier output is connected to a filter capacitor (C1). A coupling capacitor (C) is connected between the filter capacitor and the motor. The motor is represented by a circle with an inductor (L) and a resistor (R) inside. Two SCRs (SCR 1 and SCR 2) are connected to the motor terminals.



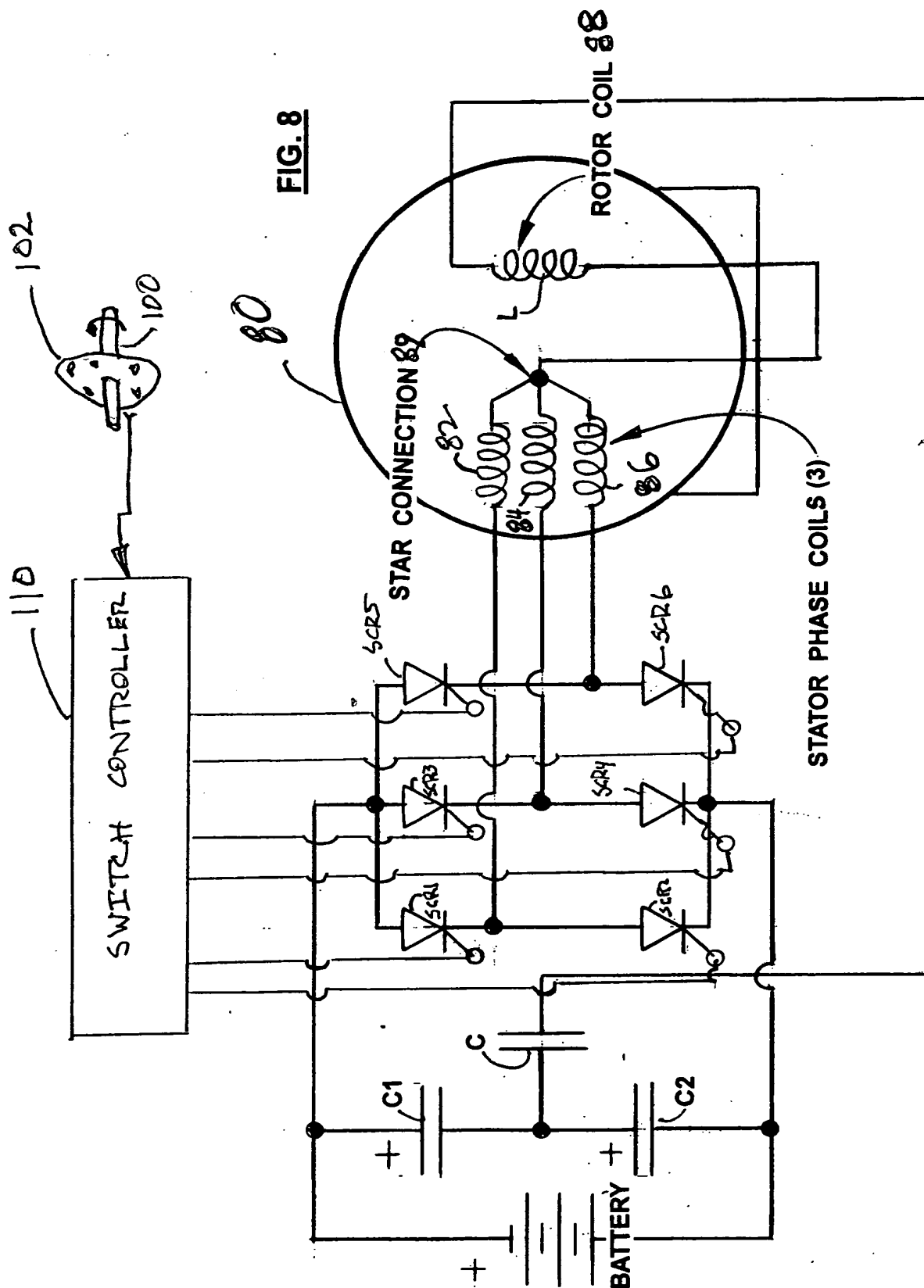


FIG. 9

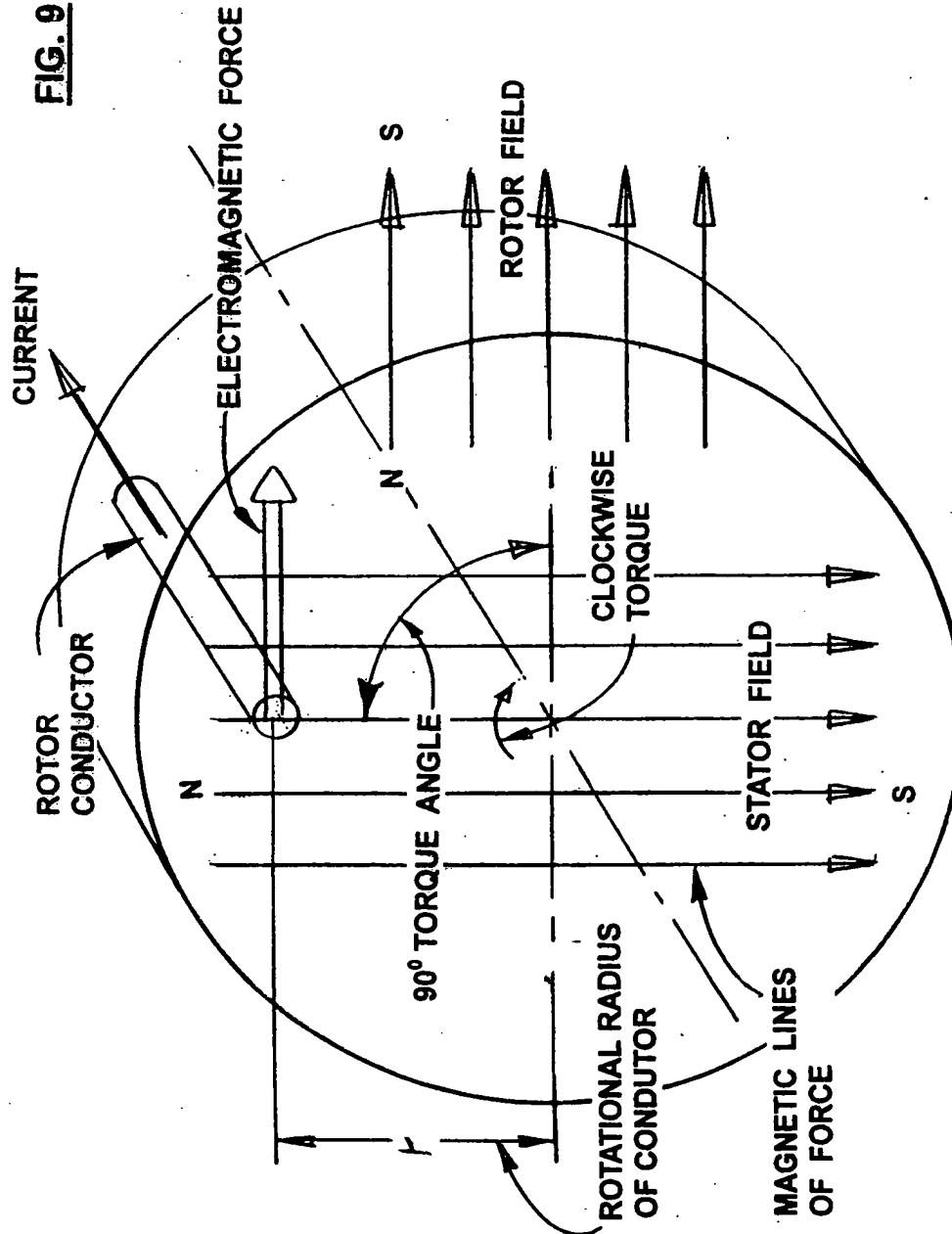


FIG. 10

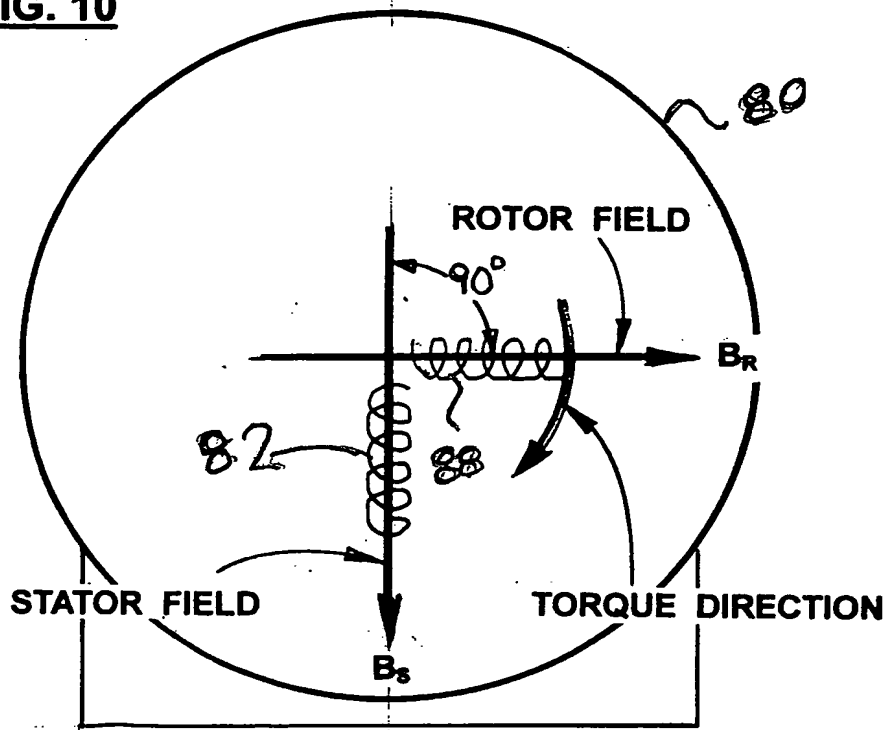
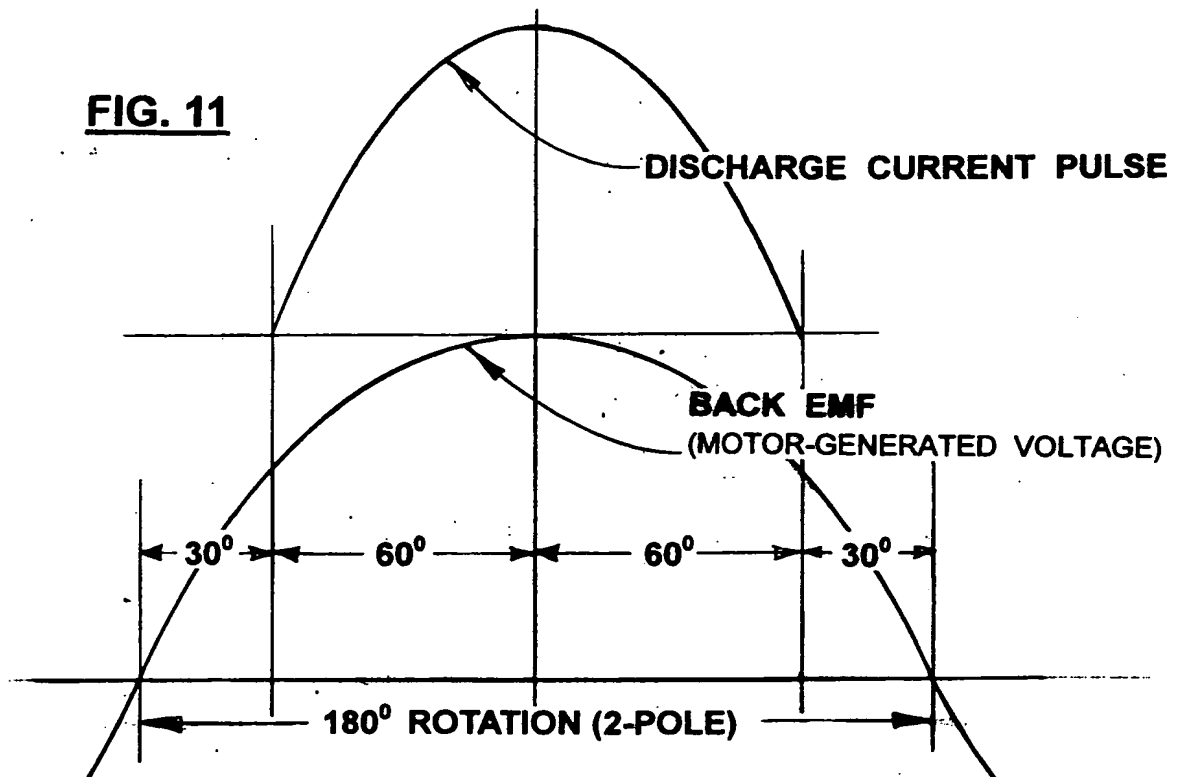
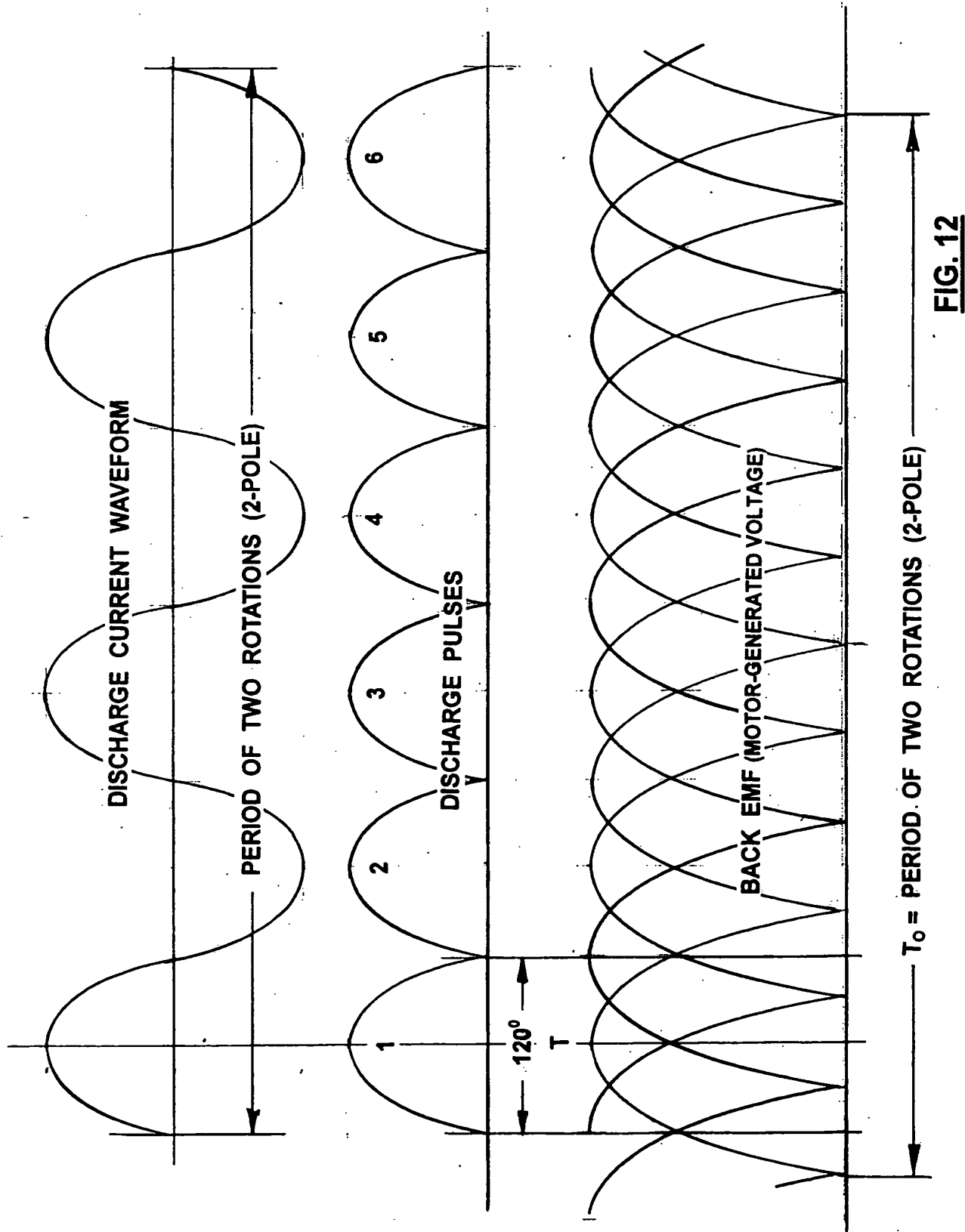


FIG. 11





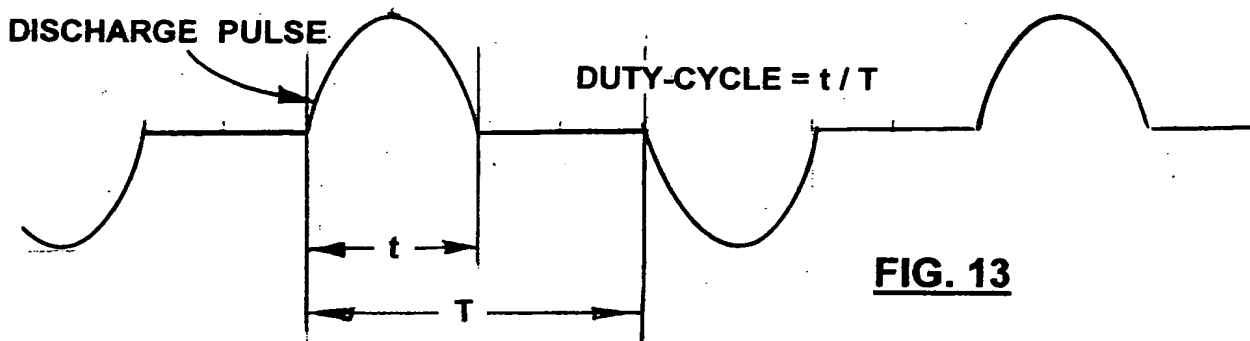


FIG. 13

DUTY-CYCLE SHOWN AT 50% = HALF FULL-LOAD TORQUE

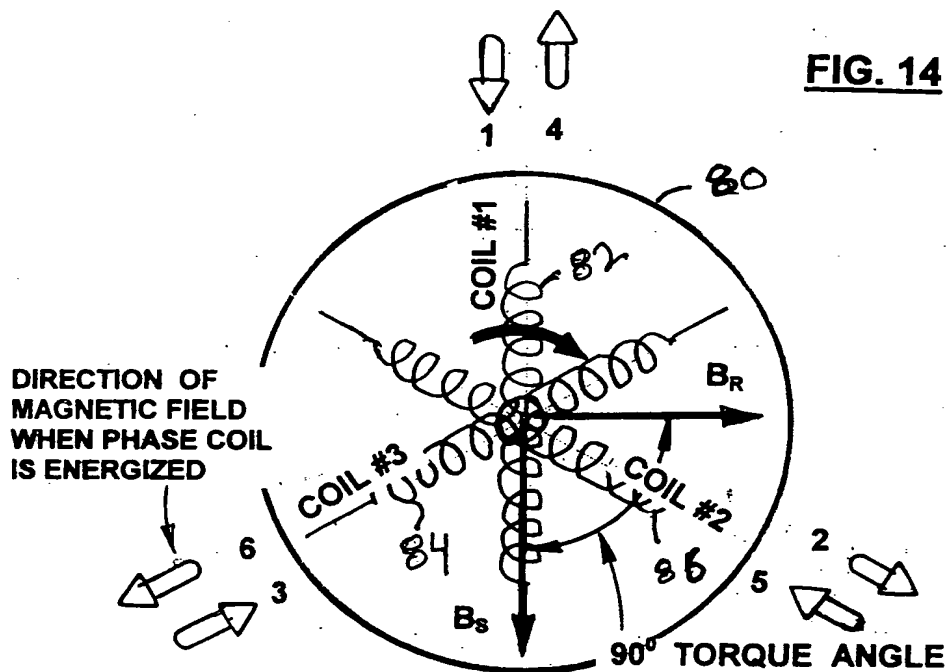
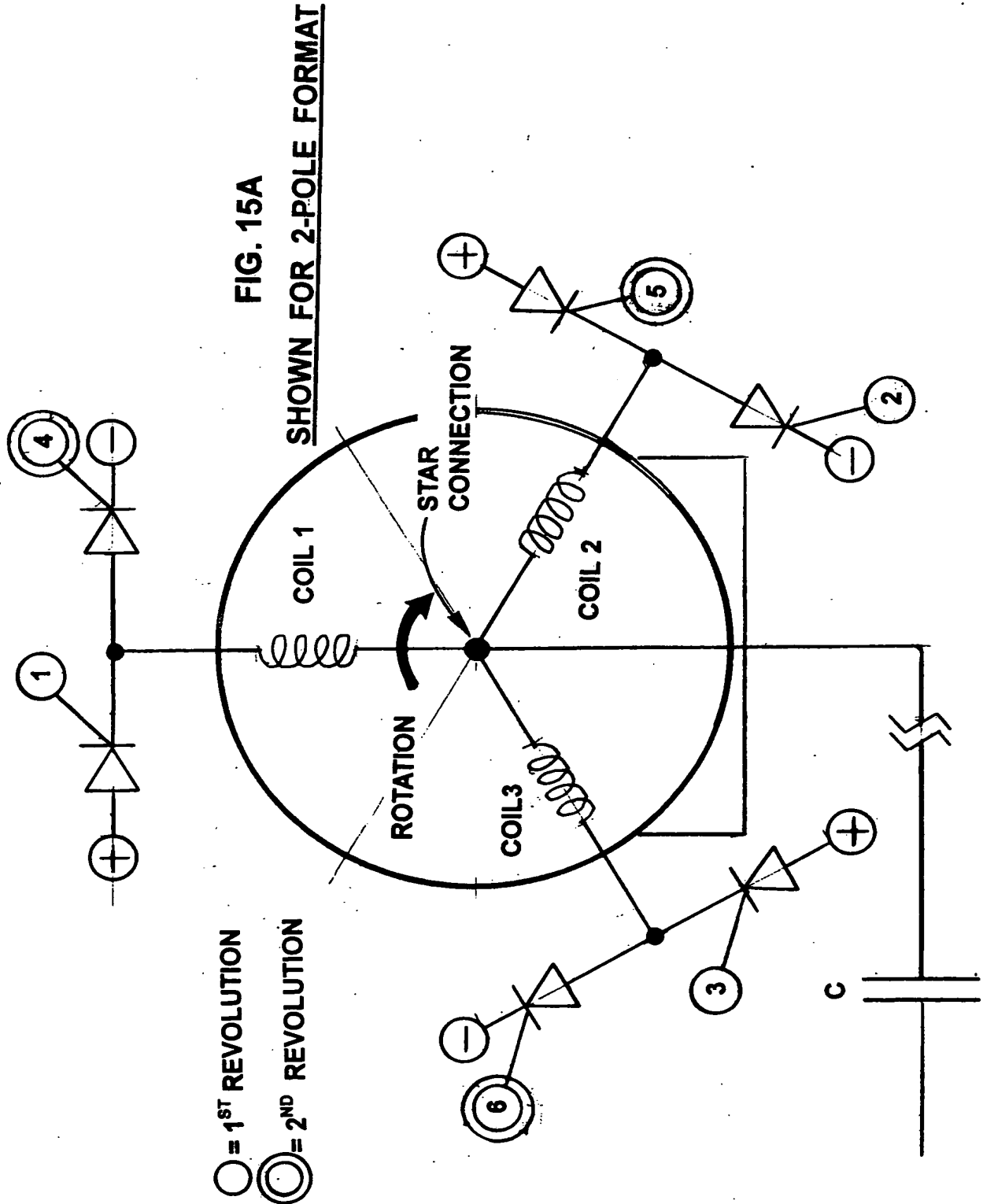
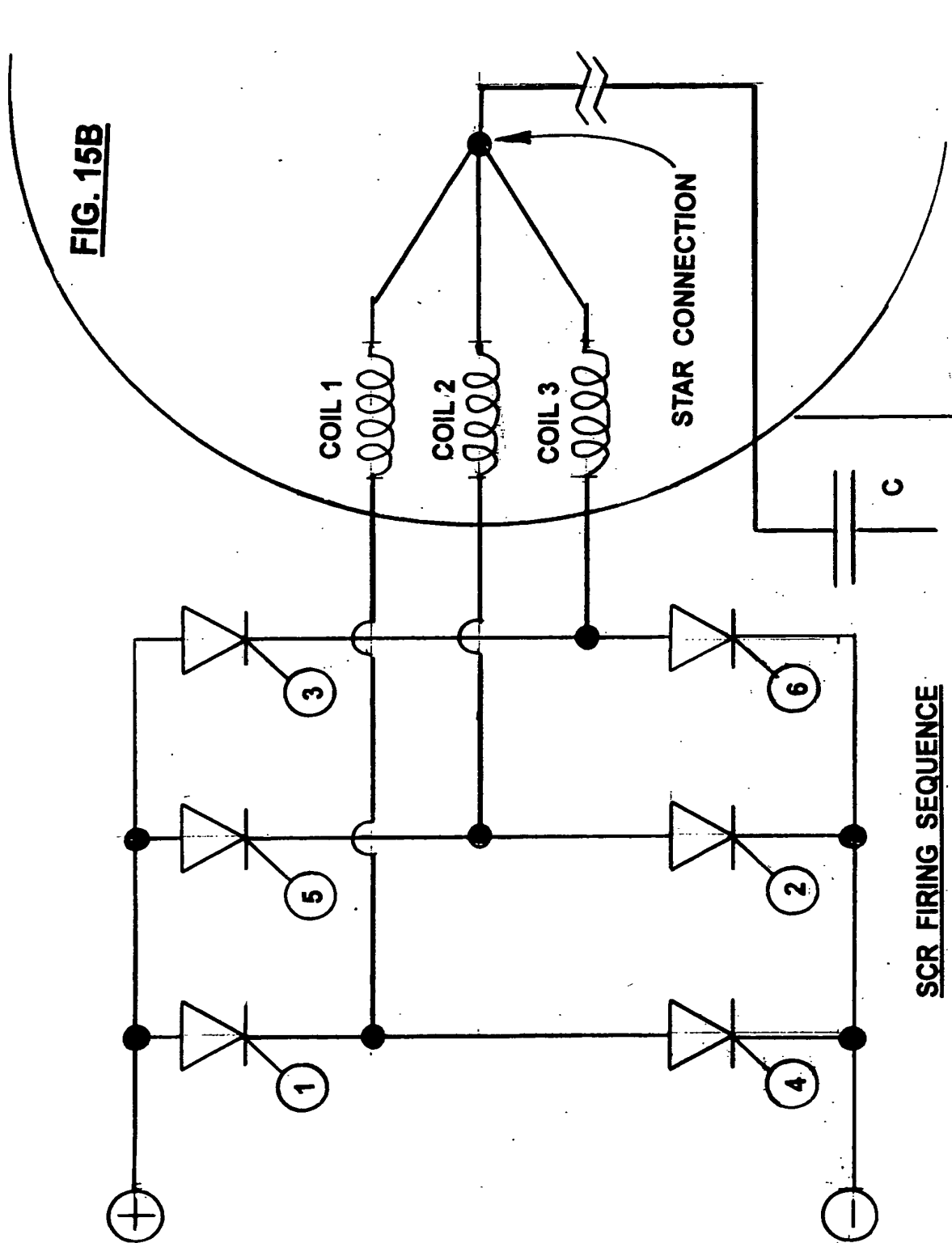


FIG. 14





2-PHASE RESONANT MOTOR

WOUND ROTOR VERSION

FIG. 16

